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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,629

04/12/2007

Peter Gaal

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QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

ISSING, GREGORY C

ART UNIT

PAPER NUMBER

3662

NOTIFICATION DATE

DELIVERY MODE

06/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/554,629	Applicant(s) GAAL ET AL.	
	Examiner Gregory C. Issing	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-38 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-38 is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15 and 17-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejection is set forth in the previous Office Action.

3. Applicants argue that the rejection should be withdrawn since the applicants' specification sufficiently describes the claim language. Applicants point to paragraph [00040] to support the feature "evaluate a validity of the obtained acquisition assistance data." However, it is not evident that MS clock offset represents "acquisition assistance data" and in fact the applicants state that MS clock bias is an example of the measured parameter. Thus, the claim language remains insufficiently disclosed in the specification.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-15 and 17-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloebaum et al (6,937,865) in view of King et al (6,211,819).
6. Bloebaum et al teach a wireless communications mobile terminal 100 comprising a location receiver 164 for receiving satellite signals from a GPS satellite 201 or from base stations

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50 and a receiver 150 for receiving signals from the communications network. The mobile terminal receives assistance data from the mobile network in the form of ephemeris/almanac information (8:5-26, e.g.), coarse location, time, Doppler and/or code phase (8:27-56, Figure 5, e.g.). The step of "determining a need to acquire" signals is not distinguishable over the prior art for reasons set forth in specific in the previous Office Action; additionally, the fact that the mobile terminal/or application 210 has made an inquiry regarding position is sufficient to show that there is a need to acquire signals (8:40+). The assistance information is used to acquire the satellite signals in a conventional manner well-known to the skilled artisan. The validity of the assistance data is evaluated (8:65-9:6) and the assistance data may be updated. The assistance data, such as the ephemeris or almanac data, is associated with a time stamp in order to determine freshness. The evaluation compares the time stamp to a threshold, such as four hours for ephemeris; in order to compare the time stamp associated with the assistance data to determine if it exceeds the threshold of four hours, it is obvious that a current time is required. More particularly, as in claim 28 of Bloebaum et al, after obtaining almanac data, time information, doppler and code phase information, the mobile terminal acquires a signal from one or more of the satellites that are theoretically available and based thereon determines a subset of satellites of which assistance (ephemeris) data is updated, wherein the updated ephemeris information is directed to updating only that ephemeris data that is stale.

7. King et al teach the conventionality of utilizing the acquisition aiding data to predict the possible range of code phases and Doppler shifts (10:46). Thus, it would have been obvious to a skilled artisan to modify Bloebaum et al by incorporating the teachings of King et al to calculate an expected time of arrival, i.e code phase, on the basis of the obtained acquisition assistance

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data since the prior art t King et al teaches the steps and the combination would yield a predictable result of receiving and using code phase information as acquisition assistance data.

8. The applicants argue that the combination of references fails to describe (1) *wherein evaluating validity is based at least in part on a mobile station clock frequency error*, and (2) *using measured parameters from a first acquired signal to perform at least one of a) evaluate a validity of obtained acquisition data or b) calculate updated acquisition assistance data*.

9. The applicant's arguments have been considered but are not persuasive with respect to the identified claims. Regarding the first feature (relevant to the embodiment of independent claim 1), it is noted that the step merely "evaluates" and that there is not resultant step associated therewith. Thus, there is no particular novelty in an "evaluating" the assistance data that distinguishes over the prior art's evaluation of the validity of the assistance. Moreover, the validity of the assistance data in the prior art combination is based on the time information, i.e. the age. The time information is inherently based on the clock frequency of the receiver, and the clock frequency inherently is associated with an error, whether small or large. Thus, the limitation over which the applicants allege novelty over the prior art fails to provide a non-obvious feature particularly in light of the teachings of the combination.

10. Regarding the second argument, as specifically described by Bloebaum (claim 28 for example), almanac data (which is clearly within the scope of the teachings of Bloebaum to have been previously received as acquisition assistance data), time information (which is received from a mobile network) and doppler and code phase (which is clearly within the scope of the teachings of Bloebaum to have been previously received as acquisition assistance data) are used in the acquiring of a signal from one or more satellites. Subsequently, updated ephemeris data is

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requested only for those satellites from which the signals were acquired in order to acquire signals at a second or subsequent time. The updated ephemeris inherently aids in the search for a signal at subsequent times/positions. Moreover, applicants' claim 24 consists essentially of two steps, receiving assistance data and compensating the assistance data at a second location. At the very least, the updating of the ephemeris after determining a location meets the scope of "compensating the first acquisition data" since the updated information will be used at a subsequent new location. Thus, the applicants' arguments are not convincing.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Boesch et al (6,438,382) disclose a method for acquiring satellite signals in a mobile wireless terminal 100 including the steps of receiving acquisition assistance data from a base station of a digital wireless network (3:57-59) when the mobile terminal is at a first location such as within a digital service area wherein the assistance data may include almanac, ephemeris, clock and ionospheric corrections, and timing and location references information (2:12-19). Additionally, Boesch et al disclose the claimed step of compensating, in the form of updating (2:2-4), the acquisition assistance information when the mobile terminal is at a subsequent location, such as in an analog service area, for use in subsequent position determinations. Boesch et al also disclose a method of acquiring a signal at a telecommunications system receiver 10 with the aid of acquisition data comprising (1) obtaining acquisition assistance data from a base station 12 of a digital wireless network 16 (3:57-59, e.g.), (2) determining a need to acquire satellite signals (such as but not limited to an E911 call), (3) acquiring a first plurality of signals from the satellites in determining position (5:6-15), and (4) periodically update timers,

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stored data values, almanac, and ephemeris. i.e. previously obtained acquisition assistance data, using parameters from the acquired GPS satellite signals (6:51-7:45).

13. Kurby (5,999,125) discloses a method and apparatus for providing acquisition assistance data to a mobile telecommunication/GPS terminal.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (571)-272-6973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory C. Issing/
Primary Examiner
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gci